

REMARKS

Pending claims

Claims 1-8 are pending. Claims 1, 2, 5, and 8 have been rejected for being indefinite. Claims 3, 4, 6, and 7 have been objected to being dependent on rejected claims. Claims 1-3, 5 and 6 have been amended. Claim 8 has been canceled without prejudice. Claims 9 and 10 have been added. Amendments are fully supported by the specification as detailed below. No new matter has been added.

Specification

The specification has been objected to by the Office Action dated July 30, 2007 for containing alleged informalities. The paragraph under "Brief Description of the Drawings" has been split into two paragraphs as stipulated by the Examiner.

With regard to the allegation that the concept of tribo-charging is exclusive of and unrelated to corona discharge, Applicants has amended the specification so that the two concepts are separated and exclusive of each other. Support for such an amendment is found, for example, on page 4, lines 4 and 3 from the bottom: "in another preferable embodiment, of the present invention, electrode powder is allowed to be electrically charged by corona discharge, friction, or the like, so that the electrode powder adheres to a feed roller in a certain manner."

Applicants respectfully request withdrawal of objections to the specification for at least the foregoing reasons.

Claim Rejections - 35 USC §112

Claims 1, 2, 5, and 8 have been rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants have amended claims 1, 2, and 5 to obviate the rejections.

Claim 1 has been alleged to be vague and indefinite because

1) it is unclear where/when in the process the step “the electrode powder is pressed by an elastic body” takes place, 2) “the extruding force” lacks antecedent basis; 3) if the powder is on a screen in non-contact with the substrate, how can the powder be adhered to the substrate by pressing/ extrusion force which never comes in contact with the substrate? and 4) it is unclear if/how pressing by an elastic body and extrusion force are related.

(page 2 to page 3 of the Office Action)

Claim 1 has been amended as follows:

Claim 1 (currently amended): A method for forming a catalyst layer on a substrate constituting a membrane electrode assembly, whereby a catalyst layer is formed by allowing electrode powder to adhere by electrostatic force and extruding force to the substrate, comprising:
providing a screen facing a substrate in a state of non-contact;
applying voltage between the screen and the substrate so as to electrically charge the electrode powder supplied to the screen;
pressing the electrode powder supplied to the screen by an elastic body to exude the electrode powder through the screen toward the substrate; and
disposing electrode powder on the substrate so as to adhere thereto by the electrostatic force and the extruding force of the elastic body.

In addressing point 1), claim 1 has been amended to state that “pressing the electrode powder supplied to the screen”. In addressing point 2), the antecedent basis to the term “extruding force” was provided in the preamble as well as in “pressing the electrode powder ... to exude the electrode powder through the screen....” In

addressing point 3), the claim was amended to state: pressing the electrode powder ... to exude the electrode powder through the screen....” By this, it was made clear how the powder can adhere to the substrate without the screen contacting the substrate. In addressing 4), the same language, “pressing the electrode powder ... to exude the electrode powder through the screen...,” makes it clear that the elastic body is used to exude the electrode powder through the screen.

Support for the amendments to claim 1 is found, for example, on page 7, third complete paragraph of the specification:

Regarding the screen 5 and the feed roller 7, the feed roller 7 is allowed to come into contact with the surface of the screen 5 by pressure. That is, the feed roller is pressed against the surface of the screen 5 so that the face of the screen 5 in contact with the feed roller 7 becomes crushed and deformed. Accordingly, the feed roller 7 is allowed to partially enter the mesh of the screen 5.

See also, the third complete paragraph on page 8:

The electrode powder 10 in the hopper 6 is expelled from the hopper 6 while being adhered to the surface of the feed roller 7. When the feed roller 7 comes into contact with the surface of the screen 5 by pressure, the electrode powder 10 is supplied on the screen 5 and is electrically charged. Further, as the feed roller 7 rotates, the surface thereof enters the mesh-like screen 5. Thus, the electrode powder 10 is pressed by the surface of the feed roller 7, which is an elastic body. Accordingly, in addition to the electrostatic force due to the applied voltage, extruding force toward the substrate 2 is applied to the electrode powder 10.

The feed roller 7 is an elastic body that presses against the screen 5 to exude the electrode powder 10 through the screen. See also Figs. 1 and 2 of the present specification for examples of this.

Claim 2 has been rejected for containing the term “above.” This term has been deleted to obviate the rejection.

Claim 5 has been rejected for allegedly being vague and indefinite for the same reasons stated for claim 1. Claim 5 has been similarly amended as claim 1 to obviate the rejection to claim 5. No new matter has been added.

Claim 8 has been canceled. Claim 6 has been amended to incorporate claim 8 to clarify what the substrate is. No new matter has been added.

For at least the foregoing reasons, withdrawal of rejections to the claims is respectfully requested.

Claims 3, 4, and 6 (Claim 8 deleted)

Claims 3, 4, and 6 have been objected to for depending from rejected base claims. The base claims have been amended to obviate the indefinite rejections. Therefore, the objections of these dependent claims have been obviated.

New Claims 9 and 10

Claims 9 and 10 have been added. Support for claims 9 and 10 can be found, for example, on page 7, line 4. No new matter has been added.

Summary

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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